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DFSC

# Fuel Line

DEFENSE FUEL SUPPLY CENTER
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April-June 1983

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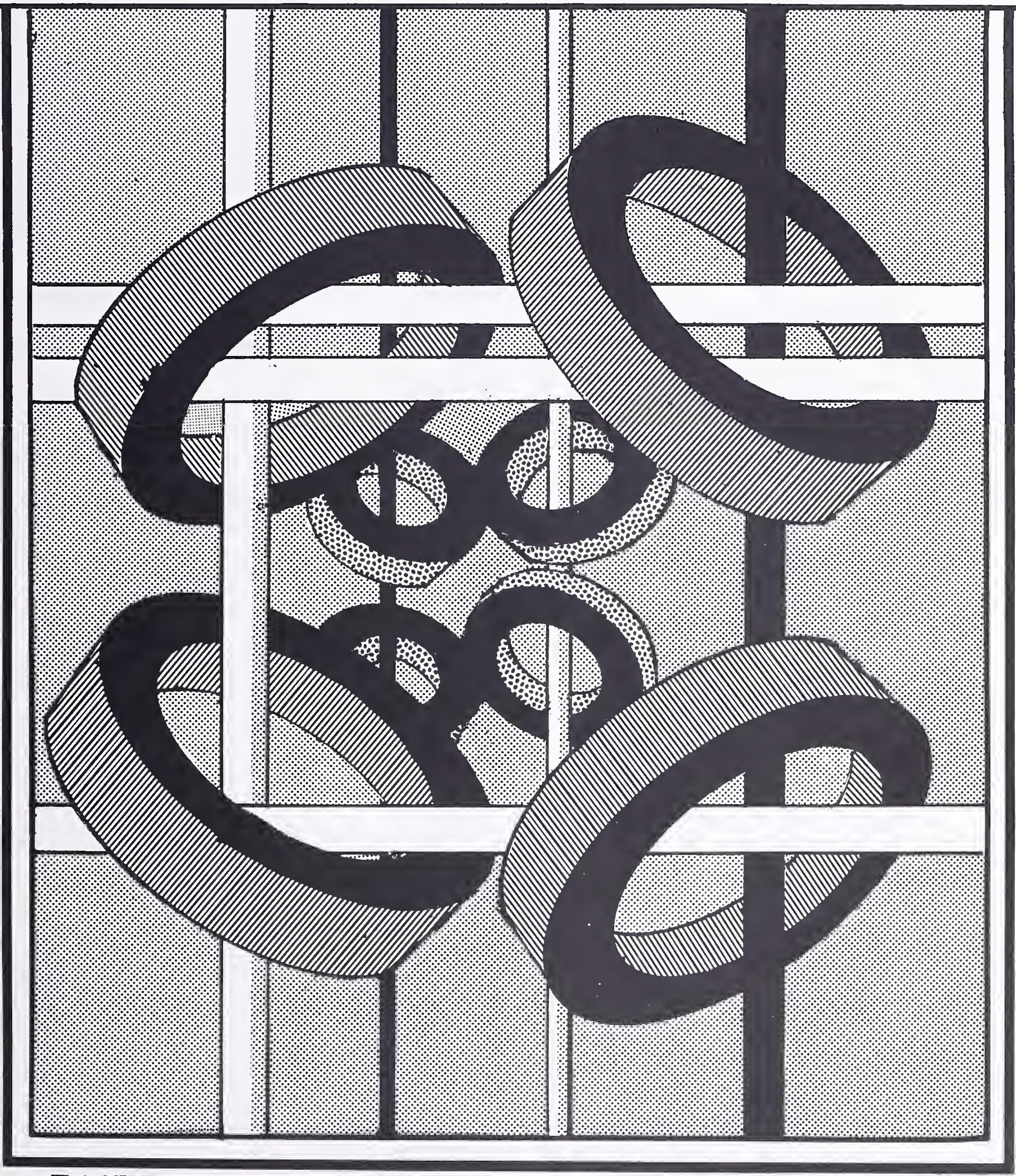

## PUTTING MICROCOMPUTERS TO WORK

# DFSC FUEL LINE

A DEFENSE FUEL SUPPLY CENTER
TECHNICAL PUBLICATION

JANUARY-MARCH 1983

DEFENSE FUEL SUPPLY CENTER

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ON THE COVER: The magnetic core assembly of a computer is portrayed by artist Pat Dixon.

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## The Future is Now

# Microcomputer Applications in DFSC

by Capt. Harvey Greenberg, USAF

*In July 1982, the Operations Research Team in DFSC's Office of Telecommunications and Information Systems acquired a Tektronix 4052 microcomputer. Since then, DFSC personnel have gained valuable experience in this rapidly expanding area of technology while using the machine for many different applications. The concept of microcomputers, specific capabilities of the Tektronix, and some current and potential DFSC applications are discussed in the following article.*

As digital computers became practical in the 1950s and 1960s, they were generally built and used as "mainframes," that is, they were large, high capacity machines which were centrally acquired and operated and used for a variety of applications by a number of customers. The principal reason that computers took this form was economic since the cost of hardware far exceeded the cost of software. With today's relatively cheap hardware, software costs, which are largely personnel costs, are receiving much more attention. Management is looking for ways to increase productivity, and microcomputers are proving to be one of the answers.

The development of systems on mainframes is a complex proposition. Specialists are needed to program and operate them, and many people and organizations must work together in order to develop a requirement and translate it into a system design. After design, the system must be programmed, tested, installed, and maintained, and, during the entire process, management must continually make decisions and allocate resources. Oftentimes, the actual programming is only a small part of the entire effort.

Microcomputers, on the other hand, are quite easy to operate. Instead of mastering a complex job control language, the operator needs to learn only a handful of commands, such as "RUN," "LIST," and "SAVE." Since only one application runs at any given time, there are no resources to manage except for the machine itself. Most microcomputer programming is done in the BASIC programming language which is among the easiest to learn, and many applications processed on this type of equipment are standard enough so that commercial *canned* software can be purchased off the shelf.

DFSC's Tektronix 4052 is a 56K (56,000 word) microcomputer which is *hard-wired* to interpret and execute BASIC statements. Whereas a conventional screen is designed strictly for character display, the Tektronix is capable of displaying graphs as well. Extensions of BASIC such as MOVE (move the cursor to point x,y) enable the operator to use this graphics capability. Auxiliary storage devices include magnetic tape cassettes and *floppy disks,* and output can be directed to a character printer, a pen plotter, or a Xerox-like device which copies the screen. When needed, the 4052 can be connected to a mainframe and act as a *dumb* graphics-capable terminal. Data can be transmitted or received through the Tektronix tape cassette over the telephone.

With the the 4052, DFSC acquired several software packages, each of which includes a program and a user manual. The Tektronix Easygraph package permits rapid preparation and updating of standardized graphs (Figure 1) in a high level graphics language, thus sparing the necessity of writing detailed BASIC programs. Many of the capabilities of SPSS and SAS, two of the most widely used mainframe statistical packages, are contained in the Tektronix Scientific Library. As a result, statistical work formerly done on a commercial timesharing system is now performed more economically on the 4052.

Much of the work in DFSC's Office of Market Research and Analysis involves analyzing time series data (trends) on fuel prices. With projects such as this, analysts have traditionally spent much of their time simply transcribing data from publications onto graphs, but after experimenting with the Tektronix, Market Research personnel were satisfied that the machine would meet their requirements and have recently acquired one. They have also begun to subscribe to various petroleum data services and will exercise the flexibility of the machine by performing their analysis on the subscription mainframe or using it to download data to the micro for processing as appropriate.

People who participated in NATO exercise WINTEX CIMEX 83 used the Tektronix to manage classified cargo data. Though a complete cargo system operates daily on the DLA mainframe, it is not secure and cannot be used for classified exercise requirements. Even if it were secure, it could not possibly be responsive because DLA's classified programs must be segregated and are therefore run only on a time permitting basis at night. Since data processing requirements for the exercise were limited to creating and manipulating tanker records, DFSC was able to acquire a suitable database management package from the local Tektronix users' group at no cost. As a result, exercise players essentially had a 24 hour classified on-line system, a concept which is at least several years and millions of dollars away in the context of DLA mainframe computing.

Potentially, Operations and Maintenance (O&M) budgeting could be done on a microcomputer. Figure 2 illustrates a simple budgeting system, and accounting could be done just as easily. In fact, the universal nature of budgeting and accounting problems has spawned the development of a whole family of so-called *electronic spread sheet* pro-

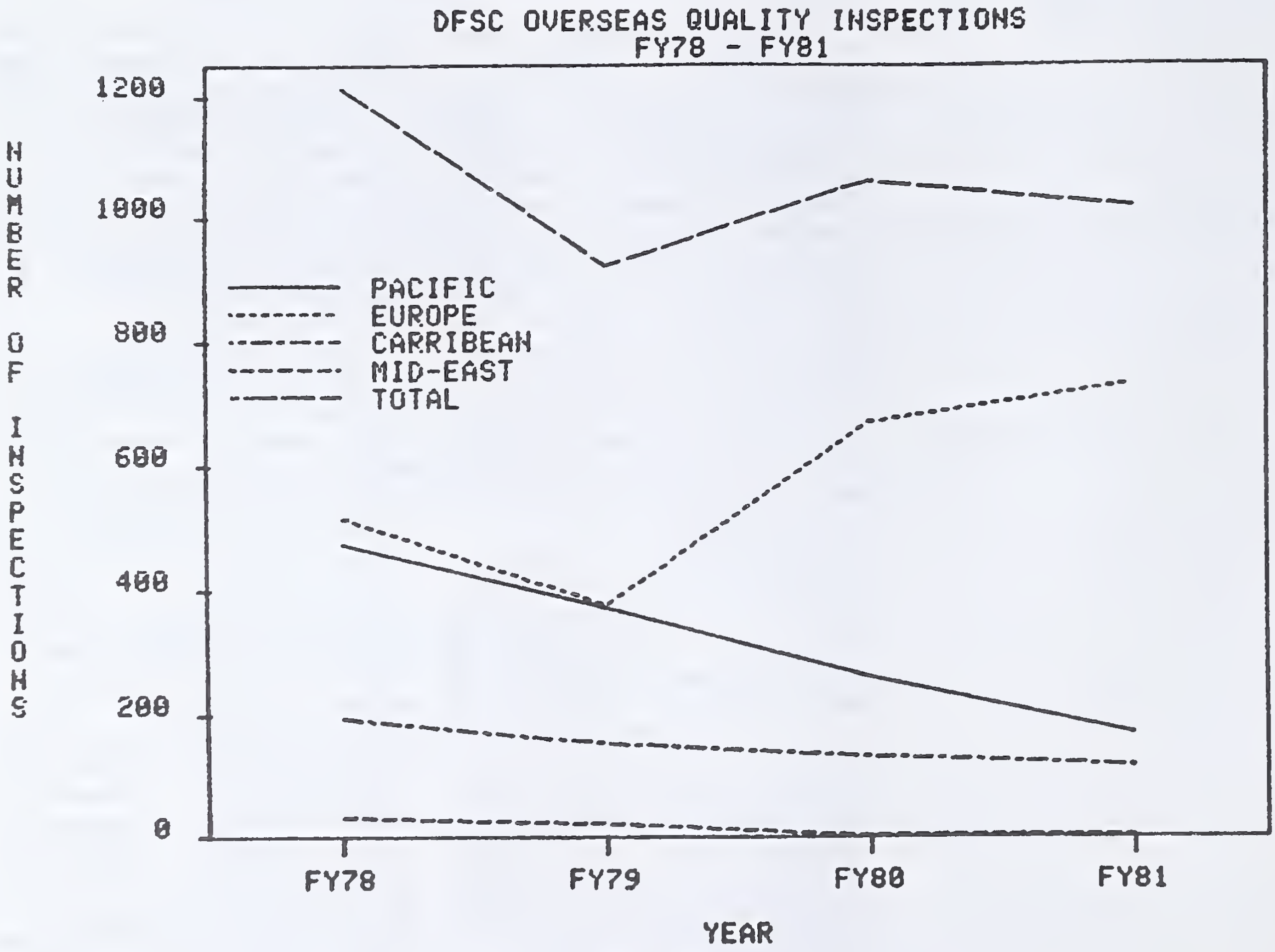

**Figure 1**

**Initial preparation of a graph prepared with the Tektronix Easygraph package takes about 15 minutes and can be updated in less than 5.**

grams such as VISICALC and SUPERCALC, which are available on most personal computers.

While the potential for microcomputers is fantastic, acquisition and application of this technology require some forethought. Proliferation is a major concern, and while the Tektronix has proven to be a powerful and versatile tool, it is not the best machine for every application. Meanwhile, DFSC will continue gaining expertise in this field and may acquire some other personal computers on a test basis as a prelude to developing a firm requirement for these micros in DFSC. DFSC personnel are encouraged to contact the Office of Telecommunications and Informations Systems at any time to obtain more information or discuss possible applications. **FL**

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*CAPT. HARVEY GREENBERG, USAF, is an operations research officer in the DFSC Management Support Office, Office of Telecommunications and Information Systems.*

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## Oil Analysis by Microcomputer

The Army plans to acquire an automatic data processing (ADP) system to support its oil analysis program by the end of fiscal year 1983. The system will permit the Army's oil analysis laboratories to compile and maintain accurate and up-to-date histories on the wear experienced by specific pieces of equipment.

The ADP system will use a network of 25 minicomputers located at the oil analysis laboratories. Data compiled at the laboratories will feed into a master file at the DARCOM Materiel Readiness Support Activity in Lexington, Ky. Information recorded in the master file should assist the Army in developing reliability-centered maintenance concepts for major items.

The Army also plans to purchase two mobile vans by the end of fiscal year 1985 to house transportable oil analysis laboratories which will contain portable versions of the Army oil analysis program ADP system. Use of the vans will enable the Army to conduct oil analysis in the field in support of the forces of the U.S. Central Command. *(Army Logistician)*

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                        CONSTANT FY83 DOLLARS

   ITEM              FY85      FY86      FY87      FY88      FY89        SUM


TRANSPORTATION     103.000   115.000    98.000   101.000   120.000    537.000
PER DIEM            56.000    60.000    64.000    64.000    59.000    303.000
SUPPLIES            48.000    52.000    65.000    65.000    69.000    299.000

SUM                207.000   227.000   227.000   230.000   248.000   1139.000



                          THEN YEAR DOLLARS

   ITEM              FY85      FY86      FY87      FY88      FY89        SUM


TRANSPORTATION     115.360   136.850   122.500   132.310   163.200    670.220
PER DIEM            62.720    71.400    80.000    83.840    80.240    378.200
SUPPLIES            53.760    61.880    81.250    85.150    93.840    375.880

SUM                231.840   270.130   283.750   301.300   337.280   1424.300
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***Figure 2***
**An 83 line BASIC program permits conversational input at the terminal, inflates and sums the line items, and prints the report shown.**

## Defense Transportation

# DFSC Plays Vital Role

by Chester C. Doberson

In recognition of the importance of a healthy transportation network to the nation's defense, President Ronald Reagan has designated 20 May 1983 as National Defense Transportation Day. The recognition of the transportation community in which many DFSC personnel are vitally involved is of particular significance to DFSC.

DFSC annually transports more than 150 million barrels of bulk fuels at a cost of over $350 million. In performing this mission, DFSC's traffic managers have long recognized the need to develop analytical tools to determine the most efficient method of transporting fuels. Transportation is one of the major areas where savings in the laid-down cost of fuels can be achieved. Over the years, the DFSC transportation community has substantially improved its operations by the effective and efficient utilization of rail, trucks, barges, tankers, and commercial pipeline systems.

During the past year, the transportation officer has faced many problems, particularly those associated with the quality deficiencies of various modes of transportation which have been aggravated by weather. In all cases, with little or no fanfare, transportation and supply personnel have swiftly responded with alternative methods of resupply.

Since the inception of Integrated Materiel Management of bulk petroleum in 1973, many changes have taken place in the transportation industry and DFSC programs. These have been primarily due to deregulation, changing economic conditions, and new safety regulations involving shipment of hazardous materials. As it has always been, the DFSC transportation community is committed to the improvement of existing transportation programs and the development of new ones in response to the ever-changing field of fuels transportation.

National Defense Transportation Day is an appropriate time to offer congratulations to transportation officers, traffic managers, freight rate specialists, and all other personnel who have contributed to the efficient transportation of Defense fuels and to thank those who are committed to meeting the challenges of the future.

**FL**

*CHESTER C. DOBERSON is a supervisory traffic management specialist in DFSC's Transportation Division, Directorate of Supply Operations.*

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# Exploration on Air Force Land Benefits U.S. Treasury

Private mineral exploration on federally owned land controlled by the Air Force has provided an estimated $75 million in royalties and rent payments to the U.S. Treasury, according to Air Force real property officials in Washington.

Charles O. Ayars of the Office of the Deputy Chief of Staff, Logistics and Engineering, said it is Air Force and Defense Department policy to allow private firms to request leases to explore for oil, natural gas and other minerals. The Air Force position supports the national policy of mineral exploration and exploitation of federal property, he said.

Private oil and gas wells are now producing at Barksdale AFB, La.; Columbus AFB, Miss.; Vance AFB, Okla.; and Dyess AFB, Tex. Exploration leases for selected sites on Tyndall AFB, Fla.; F.E. Warren AFB, Wyo.; and Luke Auxiliary Field 1 in Arizona have been granted. In California, leases for the Davis Communication Annex at McClellan AFB and the Potrero Hills Storage Annex at Travis AFB also have been finalized, according to Mr. Ayars.

Lease offers are pending or in progress for more than 100 other locations on Air Force properties in the continental United States.

The Interior Department's Bureau of Land Management (BLM) manages all mineral leasing of federal property. When a lease offer is received from a private firm, the BLM sends it to the Air Force.

The Air Force determines land availability and decides if exploration can be allowed on a non-interference with mission basis. The Air Force review considers such things as safety, security and environment. Once a lease is issued, the Air Force installation commander involved also must agree with the private firm's plan of operation.

**FL**

# Air Force Personnel Nominated for Fuels Awards

Three DFSC Air Force (AF) personnel have been nominated for the 1982 AF Outstanding Fuels Personnel Awards. These awards, presented annually, recognize Air Force personnel at various levels for their outstanding contributions to fuels operations.

Nominated for Outstanding USAF Fuels Senior Manager is Maj. Don Peschka, deputy chief of the Bulk Fuels Division, Directorate of Contracting and Production. Maj. Peschka has been cited for his initiative and exceptional performance in carrying out his responsibility for the purchase of over $7 billion annually of bulk fuels.

He is credited with being a key factor in the implementation of DOD's supply assurance concept of exchanging Naval Petroleum Reserve (NPR) crude oil for jet fuel and distillates to satisfy military requirements. He visited the NPR site, interfacing with Department of Energy and NPR representatives, and participated in complex negotiations.

Maj. Peschka has been with DFSC since July 1978.

Capt. Tom Ashman, quality assurance officer for the Directorate of Technical Operations, has been nominated as the outstanding USAF Fuels Junior Manager.

Capt. Ashman has served as the sole staff specialist for the DFSC technical program in support of the Strategic Petroleum Reserve (SPR) and served on an emergency basis as an onsite quality assurance representative for the SPR at Coatzacoalcos, Mexico.

He also developed the quality assurance representative training program and managed the DFSC technical program for fuel supply to the Ascension Islands.

Capt. Ashman assumed his current position in July 1981.

The Outstanding USAF Fuels Superintendent Award nominee is MSgt. Billy Chandler. He is the quality assurance representative for DFR-Caribbean.

In addition to performing his regular duties in implementing quality and quantity control programs at refinery and terminal locations, he assisted in the refinement of product sampling programs and initiated a local loss analysis program.

During the fall of 1982, MSgt. Chandler played a unique role in the tanker resupply of the USAF Range Station on Ascension Island. He implemented procedures for a product exchange agreement between the U.S. and British governments and was involved in the refinement of terminal operations and laboratory procedures.

MSgt. Chandler joined DFR-Caribbean in February 1981.

**FL**

## The Subject is Oil

The Eleventh World Petroleum Congress to be held in London this year will have as its theme "Petroleum For The Next Century."

It will mark the fiftieth anniversary of the First Congress which assembled in London in 1933. The official opening at the Royal Albert Hall on Sunday, 28 August, will be followed by technical sessions at the Barbican Center over five days beginning 29 August, with the closing ceremony scheduled for 2 September.

The organizers believe the topics included "will be of interest to members of governmental and academic bodies, research centers, financial and economic institutions, as well as those who are working directly in the oil and gas industries." There will be 12 main review papers, round table discussions on 11 subjects (ranging from enhanced recovery to energy conservation), and panel discussions on a dozen more.

Technical programs will include the report of an international study group on classification and nomenclature for petroleum and petroleum reserves, and a series of special papers selected by National Committees. Technical visits, films, a book exhibition, social activities and tours will add variety to the program. *(Petroleum Gazette)*

**FL**

May is High Blood Pressure Month

**Have Your Blood Pressure Checked**

American Heart Association
WE'RE FIGHTING FOR YOUR LIFE

# Refinement of DFSC

by Denise M. Gower, Editor

# Contracts Saves Money

In the volatile petroleum market, saving money is often a subjective prospect. Despite this fact, DFSC is expected to get the most for the Government's dollar while fulfilling the needs of its military and civilian customers. To increase its ability to do so, DFSC took a number of measures in 1982 to increase competition among bidders which have already borne significant results.

A program established in 1981 under which crude oil produced at the Naval Petroleum Reserves (NPR) is exchanged for bulk petroleum products was utilized in 1982 to cover all JP-4 (jet fuel) and Diesel Fuel Marine (DFM) fiscal year 1983 requirements for the entire continental United States. This was a significant achievement for the program and followed tremendous efforts and refinements of the original concept.

In 1982 the solicitation was restructured so that it was opened to all suppliers, not just refiners, who were permitted to sell, as well as refine or exchange, the crude oil they received for their products. Additionally, the economic price adjustment basis for products purchased was changed from the NPR Elk Hills crude oil posting to market prices published in a leading trade journal. DFSC personnel telephoned and visited oil companies to explain the program to them and to point out the attractiveness of the stability of military fuel requirements in the existent market.

These efforts paid off with 65 offers made. Twenty-eight contractors will receive a total of approximately 95,000 barrels per day of NPR crude oil in exchange for 1.72 billion gallons of JP-4 and 524 million gallons of DFM. Total value of the contracts is $2.1 billion. A review of the prospects of continuing the NPR exchange program as part of DFSC's supply assurance effort is ongoing.

Bulk fuel bids can now be more accurately evaluated because of the development of an automated system of obtaining freight rates from the Military Traffic Management Command (MTMC). Known as the Transportation Rate Information System (TRIS), it provides on-line updates of the freight-rate data base. TRIS has been restricted to freight rates for continental U.S. JP-4 and JP-5 procurements, but is being expanded to include other bulk products.

Initiatives taken by the Ground Fuels Division led to a significant improvement in competition and contract coverage in the Posts, Camps, and Stations (PCS) Program. The PCS Program provides motor gasoline, heating oil, and other petroleum products to more than 5,000 military and federal civilian installations.

Because of serious supply shortages, efforts were made in 1980 and 1981 to attract more bidders. Solicitations were streamlined and simplified, and a schedule of pre-bid conferences was established. The conferences provide potential bidders with an opportunity to meet face-to-face with contracting personnel to have procedures and provisions explained to them.

In 1982 the conferences were continued and the procurement process was accelerated to permit resolicitation of uncovered items before commencement of the delivery period. Contracting personnel telephoned requiring activities to identify fuel dealers in their areas and to clarify local delivery conditions. Thousands of prospective suppliers were contacted by telephone and encouraged to respond to solicitations.

As a result of these actions and an improving market situation, requirements coverage under the PCS program has increased to 95%. In previous years, coverage was generally below 75%. A significant increase in competition has also been noted. Some major regional solicitations averaged more than five bids per line item.

Other actions are expected to further improve the program. Purchase requests are being reviewed and discussed with submitting activities to assess requirements more accurately. Centralized payment of Army and Navy invoices has resulted in quicker payment and is enabling DFSC to compare submitted requirements with actual use. A restructuring of schedule pages on program buys is also planned. Requirements will be grouped by geographical area instead of requiring activity, to enable potential offerors to more easily identify products needed in their area.

A new contracting method utilizing a more detailed statement of work for the operation, maintenance, and protection of government-owned, contractor-operated (GOCO) petroleum terminals was instituted by DFSC in 1982. The new method has been utilized for solicitation requirements at San Pedro, Calif., and Casco Bay, Maine, but is expected to be adopted for use at other locations as contracts expire.

The new contracting method encompasses several significant changes. The clear statement of contract requirements enhances competition and makes contract administration more efficient. Whereas awards were formerly made to the low, responsive, responsible bidder, offerors are now evaluated on technical expertise and experience as well as price, thus encouraging bids from highly qualified firms. Solicitation by formal advertisement has been replaced by negotiation, a change which benefits both the Government and offerors by providing a tool for clarifying requirements and responsibilities.

These changes are just a part of DFSC's continuing effort to improve its ways of doing business so that fuel and related services are procured efficiently and economically. **FL**

# NFD Sasebo: The Evolution of a Defense Fuel Support Point

**by Lieutenant V.T. Whitlock, SC, USN**

The U.S. Navy Fuel Detachment (NFD), Sasebo, is a detachment of NSD Yokosuka, Japan, and consists of 3 separate terminals: Akasaki, Iorizaki and Yokose. All together, the 3 terminals comprise over 400 acres of real estate with 5.3 million barrels of fuel storage. The NFD mission is to receive, store and distribute bulk petroleum products to all U.S. military and civilian agencies on the island of Kyushu and the southern part of the island of Honshu, units of the U.S. Seventh Fleet, U.S. Forces in Korea, and other overseas destinations as directed.

Akasaki, the main terminal, is situated 2.5 kilometers from the City of Sasebo. This is a city of approximately 250,000 people located in the Nagasaki prefecture of Kyushu (the southernmost island of Japan). Sasebo Bay is a picturesque paradise of clean blue waters protected by gentle, rising mountains of lush vegetation. The shoreline of the bay abounds with tiny fishing villages whose inhabitants toil endlessly to reap an existence from the sea and provide the mainstay of the Japanese diet.

The fishermen of this area cultivate oysters, clams and a myriad of fish species in large floating net cages. They harvest seaweed from the shallows and make a daily ritual of checking their octopus traps. Anyone here can easily see that a sound ecology is essential not only to preserve the aesthetic serenity of the community, but also to insure the existence of its people.

In Japan up until the latter part of the TAISHO Era (1910-1925) coal was primarily used for ship propulsion for the Imperial Navy. After the establishment of an Imperial Navy Yard in Sasebo in the late 1800s a coal depot was opened near the Akasaki waterfront. During the early part of the TAISHO Era, when both coal and black oil were used, several underground concrete black oil tanks were constructed at Kawanotini (which is adjacent to the Akasaki waterfront) between 1909 and 1913. Additional underground concrete tanks were begun at the beginning of WWI and completed in 1918. All of these tanks are still in active service.

Around 1919 as the number of black oil burning ships increased, a section of privately owned land at Iorizaki, Sasebo, was acquired for the construction of additional tanks with a total capacity of 500,000 barrels. The scarcity and high cost of iron during WWI made the use of steel in the construction impossible. A nonferrous oil-tight concrete construction method was devised and the first rectangular underground concrete tank at Iorizaki was completed in 1921. This construction method proved successful and three more tanks were completed by 1926.

In 1932 Japan withdrew from the League of Nations and began military expansion. Thus in Sasebo the third fuel terminal (Yokose) was planned for construction. Work on the first tank (372,000 barrels underground concrete) started in 1935 and by 1942, seven tanks had been completed. These tanks were similar to the Iorizaki tanks in construction concept except that they were round instead of rectangular.

All fuel tanks mentioned thus far had been constructed for black oil storage. Gasoline was also necessary for military operations and the first gasoline storage facility in Sasebo was hidden in tunnels at the eastern tip of the Iorizaki terminal. This tunnel system was completed in 1921. The tunnels were constructed of brick. Measuring 4 meters wide they initially had shelves along the sides where cans of gasoline were stored. In 1926 cylindrical steel tanks were introduced within the confines of the tunnel system.

Recognizing the need for greater aviation storage capacity, the Imperial Navy began construction of a circular underground concrete tank at Yokose terminal using the ferro-concrete process. This process had to be very exacting because of the permeability of gasoline. The construction proved successful and two additional 34,000 barrel tanks were completed by 1942.

After WWI NFD Sasebo was operated under the control of the Commander, U.S. Navy Base, Sasebo. In July 1947, the Mitsubishi Oil Company was awarded a contract to operate and maintain the terminal. Cognizance of the terminal came under the United States Army on 25 June 1948 and it was operated contractually by the Japan Oil Storage Company until 1 July 1951. At this time the U.S. Army's Quartermaster POL Group assumed control and operation until 1 January 1971 when the facility was

UPGRADING—This scene of the Iorizaki terminal shows three large concrete tanks in the background which the government of Japan plans to replace with steel ones. The tank to the right of these has already been replaced. The pier is shown in the foreground.

returned to the United States Navy.

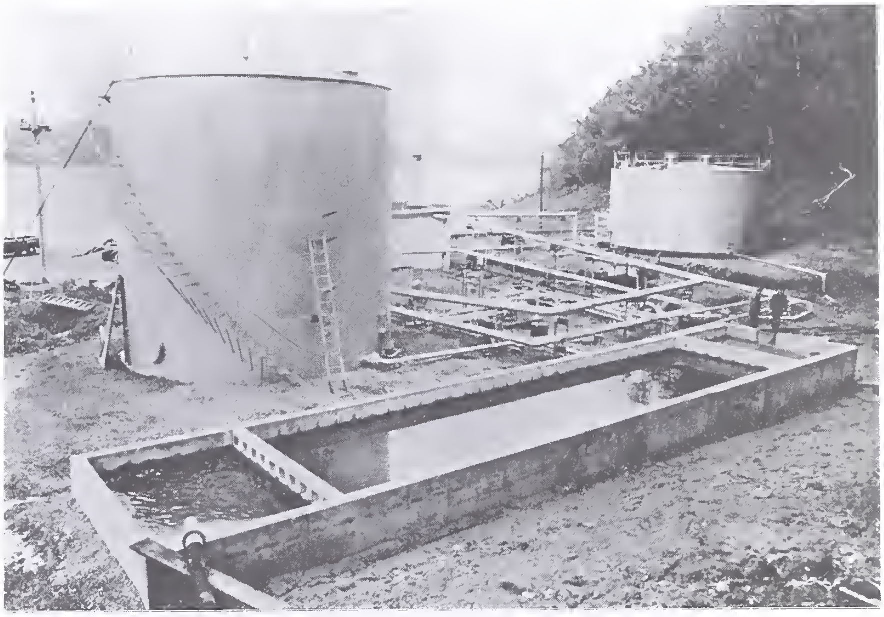
During the years of Army control (1951-1970), five additional aboveground steel storage tanks were constructed. Each tank is of 78,000 barrels capacity and was completed in 1954. These were the last storage tanks to be built on the detachment.

In 1971 the U.S. Navy inherited an antiquated fuel facility and recognized the need for extensive restoration to tanks and pipeline to preseve mission capability. A few minor projects were accomplished in the early years of the 1970s and partially funded by DOD contingency funds. These measures were a stepping stone in the right direction but much more needed to be done to make NFD Sasebo the outstanding facility it is today.

With today's modern Navy running on lighter, highly refined petroleum derivatives, many concrete tanks had to be painstakingly repaired and lined to prevent these new highly permeable products from seeping through the porous concrete. Linings and crack repairs eventually proved to be inadequate for our largest tanks. (The floors of these tanks had an area roughly equivalent to the size of three football fields.) After several years of unsuccessful repair attempts on the Iorizaki tanks 3 and 4, the Government of Japan offered to replace these tanks and fund them under their facilities improvement program.

The assistance of the Government of Japan was not enough to guarantee the ecology of Sasebo Bay. Much more needed to be done. Special projects were identified and developed to replace the original cast iron pipelines which had become dangerously brittle with age. Leaking tanks were programmed for repairs and relining. Oil/water separators were constructed and additional interceptors are programmed for strategic locations.

Navy Fuel Detachment, Sasebo, is a rapidly improving facility. Over the past few years material condition and aesthetic qualities have taken a complete turn-around. All military personnel have actively been involved in the preparation and implementation of a Plan of Action and Milestones to identify necessary improvements and renovations. An extensive maintenance system has been developed which includes preventive and corrective maintenance for all detachment assets. All PMS requirements except electrical are accomplished by an in-house work force. Work beyond NFD's scope is accomplished by the Public Works Department of COMFLEACTS Sasebo or is developed into a Special Project.



SEPARATION—The water-separator equipment shown here recently replaced older, less efficient equipment. After separation, clean water is pumped into the bay and oil is sent to the "cookers" shown in the background where the small quantity of water which still remains is removed.

NFD has also relied upon self-help improvements for aesthetic titivation. The military personnel of NFD have chipped in to do painting and interior remodeling of buildings. Grounds appearance was also greatly improved through the removal of abandoned railroad trackage and re-landscaping the area. Deteriorated buildings which were once eyesores to NFD have also been demolished and removed by self-help volunteers. These improvements have contributed greatly to NFD's reputation as a "garden spot" in the petroleum business.

Protecting the beauty of the land also meant protecting the ecology of the environment. The waters of Sasebo Bay are the existence of its people and fuel in the water is an amplified disaster that receives national attention. Prevention of a spill is NFD's primary responsibility.

Pipeline replacement and tank repair have been major efforts in spill prevention preparedness. Daily operations and tank cleaning or water draining can also be culprits of oil emissions. In this respect NFD has identified critical areas for the construction of additional oil water separators, and an oil interceptor trench around the periphery of the Iorizaki terminal is in its final stage of construction. Training is also a key element in prevention and oil spill control. An individual P.Q.S. system for oil spill prevention and control has been developed and incorporated into the training program for NFD personnel. Through this training program, the NFD's enlisted personnel are eventually awarded the 9559 NEC.

Dedication, pride, and a sense of responsibility are evident in the working atmosphere at NFD. Professionalism abounds and team spirit is high.

**FL**

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*LT. V.T. WHITLOCK is the Assistant Officer in Charge of the Navy Fuel Detachment in Sasebo, Japan.*

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# DFSC Nominates Two For Small Business Awards

**Norma Bailey-Muller**

Two procurement agents from DFSC's Special Contracts Division have been nominated for DLA small business awards for fiscal year 1982. Norma Bailey-Muller was nominated for her assistance to small business and Janet Ferguson for her assistance to small disadvantaged business.

The Special Contracts Division was established to act as an agent for the Department of Energy in acquiring crude oil for the Strategic Petroleum Reserve. The procurement of crude involves a process which is much more complex than those of other buys at DFSC. Many offerors need assistance in understanding the unique conditions which must be met and the manner in which bids will be evaluated. Many small firms bidding on these contracts have never done business with the government before and therefore need assistance in understanding government procedures, terminology, and documents.

Bailey-Muller worked with eight small business firms who submitted offers in response to the crude solicitations. Subsequently, two of those firms were awarded contracts under the program totalling close to $130 million.

An official of one firm with which Bailey-Muller worked was so impressed with her professional assistance that he wrote a letter to his Senator extolling her efforts and those of the entire Special Contracts Division.

Ferguson is credited with helping four small firms become proficient in the bidding process, but her assistance to two small disadvantaged firms, neither of which had ever before offered on U.S. government solicitations, was most noteworthy. One of these companies, an American Indian firm, later received an award for crude oil.

Both companies sent letters of appreciation commending Ferguson's professional efforts. One of the companies also conveyed its appreciation for Ferguson's efforts to two U.S. Senators.

DLA makes annual awards to one employee for his or her overall contribution to the small business program and one for his or her contribution to the disadvantaged business program. The selections are made from a pool of nominees submitted by primary level field activities.

**FL**

**Janet Ferguson**

# Fuel Line Gleanings

A letter of appreciation for DFSC's efforts in support of the Rapid Deployment Joint Task Force (RDJTF) was received by VADM E. A. Grinstead, Director of DLA. Written by Lt. Gen. Robert C. Kingston, USA, Commander of RDJTF, the letter particularly noted DFSC's flexibility and cooperation in its support of Exercise Jade Tiger 83.

* * *

The latest energy data including crude oil prices, petroleum consumption, imports, and stocks, is now available around-the-clock through a pre-recorded Department of Energy (DOE) service. The Energy Information Administration's (EIA) "Data Line" capsulizes key information in advance of its publication in four major EIA publications.

The telephone messages are recorded each Friday morning and updated or expanded as warranted. The Data Line telephone number is (202) 252-8853. It is *not* toll-free. Callers may obtain further information during regular hours by calling EIA's National Energy Information Center (NEIC) on (202) 252-8800. The NEIC is open 8:00 a.m. to 5:30 p.m. on week days.

* * *

The Army has developed a petroleum hoseline system capable of cross-country operations which can mechanically lay and retrieve hoseline as large as 6 inches in diameter. The system consists of a reel assembly mounted on a 5-ton truck, a diesel-powered engine, and reels of 500-foot-long hoseline. It is designed to lay or pick up 20 miles of hoseline a day and will be used in corps and division rear areas to move bulk fuel. The Army plans to acquire prototypes of the system in 1984. *(Army Logistician)*

* * *

DOE has issued a report on the status of corrective actions taken in response to an earlier report's recommendation to improve the accountability and adequacy of oil received and stored in the Strategic Petroleum Reserve. A limited number of single copies of "Accounting for Oil Received and Stored in the Strategic Petroleum Reserve," DOE/IG-0188, December 1982, are available free from DOE, Office of Inspector General, IG-1, Washington, D.C. 20585.

* * *

Velma Howie, the lead traffic management specialist with Defense Fuel Region-West (DFR-W), was recently recognized for her 40 years of government service. She joined the fuels community in 1961 when she began working for the Air Force Fuels Office, which later became DFR-W. Her first position with the Government was with the San Bernardino Air Materiel Area.

* * *

"Logistics, an International Technology" is the theme of the 18th annual International Logistics Symposium. Sponsored by the Society of Logistics Engineers, it will be held 9 to 11 August at the Hyatt Regency in Atlanta, Ga. *(Army Logistician)*

* * *

A pocket-sized guide of energy statistics has been released by the DOE's Information Administration. The Synopsis of the 1981 Annual Report to Congress contains 61 graphs and tables, presenting a 30 year statistical review of the energy picture and a projection of energy-related trends to the year 2020. The booklet may be ordered from Department 36-B, Superintendent of Documents, Washington, D.C. 20402. The price is $4.75, and the stock number is 061-003-00265-0. Orders must be accompanied by check or money order, or charged with VISA or MasterCard.

* * *

Defense Fuel Supply Center employee Ruth Morris, a procurement agent in the Bulk Fuels Division, received $50 for her suggestions to make the distribution list for contractural documents easier to use. Morris recommended that certain sections of the book be reorganized and that clear and detailed instructions for its use be written.

* * *

Energy use in the Army during fiscal year 1982 declined 11.96 percent compared with fiscal year 1975, the base year for energy conservation calculations. This resulted in a savings of $315 million. *(Army Logistician)*

* * *

DLA has established the Hazardous Materials Technical Center (HMTC) to gather and distribute technical information and guidance on handling, storing, transporting, and disposing of hazardous materials and wastes. Persons interested in technical or general information may address inquiries to HMTC, P.O. Box 8168, Rockville, Md. 20856 or call toll free (800) 638-8958. *(Army Logistician)*

* * *

A booklet explaining how to save truck fuel through improved aerodynamics, decreased rolling resistance, more efficient power trains, speed control, and improved vehicle maintenance, driving habits and operating procedures has been published by the Motor Vehicle Manufacturers Association of the United States. It may be obtained by writing to the Motor Vehicle Manufacturers Division, 1909 K Street, NW, Suite 300, Washington, D.C. 20006.

* * *

DOE placed the three hundred millionth barrel of crude oil into the Strategic Petroleum Reserve on 30 January 1983. DFSC, operating under an inter-agency agreement with DOE, has purchased approximately 83% of the total.

* * *

A new study published by the Department of Energy's Bartlesville Energy Technology Center looks ahead nearly two decades at changes in store for the U.S. transportation fuel refining industry. Three types of fuel—gasoline, diesel and broadcut—were considered. The report determines the mix of engine and fuel types that would minimize fuel production costs and keep transportation fuel prices affordable for the consumer. Copies of "Impacts of Alternative Engine Technology on the Refining Industry," DOE/BC/10102-1, are available free from Bill Linville at the center, P.O. Box 1398, Bartlesville, Okla. 74005. **FL**

## Help Wanted

## Need QAR News

One of our readers has noted that news on quality assurance representatives (QARs) was greatly lacking in our January-March 1983 issue. There continues to be a dearth of information on QAR activity.

We need your help!

We all know that QARs are crucial to the performance of DFSC's mission. Please send us your QAR news and articles so that *Fuel Line* may help spread that message.

—The Editor

## Conferences Ease Bidding Process

Approximately two weeks prior to each regional Posts, Camps, and Stations solicitation, DFSC's Directorate of Contracting and Production holds a pre-bid conference for potential contractors. The conferences provide an opportunity to meet with procurement personnel who will answer questions and explain how to do business with DFSC.

Conferences are tentatively scheduled for the week of 16 May in the state of New York and the week of 13 June in California. Further information is available by calling the Ground Fuels Division at (202) 274-7840.

**EYE FOR ERROR — An observant eye earned John Collins a cash award. Collins, a traffic management specialist with Defense Fuel Region-Central, discovered billing errors by transport companies, thus saving the government more than $29,000. Making the award is LTC Plocek.**

### DFSC Sends Representative

## DLSC Conference Focuses on DIDS

More than 200 government civilians, industry officials, and military logistics officials from throughout the United States met at the Defense Logistics Services Center (DLSC) this winter. Representing DFSC was Thaddeus Cooper of the Directorate of Technical Operations.

The conference was the third meeting between those who manage and those who use information provided by the Defense Integrated Data System (DIDS), which is managed by DLSC.

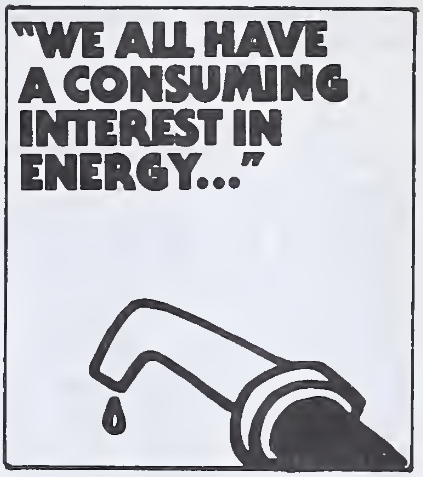
DIDS is a central data bank of information common to the logistics support of all agencies using the Federal Catalog System. DLSC, with more than 800 civilian and military personnel, is responsible for the management of the central operations of the Federal Catalog System. This system provides a common language for communication between the military services, civilian agencies, NATO members, and other foreign governments and industries engaged in managing material.

Prior to the implementation of DIDS, much of the logistical information required to support the catalog system was maintained by each government agency. Under DIDS, the information has been standardized and recorded in one place making it more readily available to those who require it. The single data base also provides more current information than was formerly available in the previously scattered data file.

As the only activity authorized to assign National Stock Numbers to new government supply items, DLSC is also charged with the responsibility of maintaining current information on items already in the system. Approximately 3.6 million such transactions, ranging from the assignment of stock numbers to item changes, are processed during an average month, and each of these transactions has an average three-day turnaround rate.

The conference featured a number of presentations and panel discussions from both the managers and users of DIDS.

The purpose of the conference was to provide a forum through which DIDS could be improved, in addition to helping to improve the understanding of DIDS at the grassroots level. To this end, conference members addressed areas of achievement and concern, exchanged ideas on how to improve the performance and utility of the system, and reviewed approved policies and future plans to strengthen common directions. **FL**


"WE ALL HAVE A CONSUMING INTEREST IN ENERGY..."

**SAFETY WINS — Lt. Col. Lenz, USAF, Commander of Defense Fuel Region-Southeast (DFR-SE), and Carol Parris, safety monitor for DFR-SE, display the small unit safety award presented to the DFR by Brig. Gen. Davis, Commander of the Tyndall Air Defense Weapons Center. The award was made for overall excellence in ground safety in 1982.**

# Coal Studies Reveal the Past

National Park Service historians have sought the technical assistance of the Energy Department's Pittsburgh Energy Technology Center to help unlock the mysteries of a shipwreck that occurred during California's Gold Rush nearly 130 years ago.

On 2 December 1853, the paddle-wheel steamship *Winfield Scott* ran aground and sank off the Santa Barbara coast in what is now the Channel Islands National Park in California. Officials from the National Park Service's San Francisco Office recently recovered a sample of coal from the wreck and, from it, they believe they can learn more about U.S. trade practices in the mid-1800s. This month, they dispatched the coal sample to the Energy Department's coal analysis laboratories in Pittsburgh.

Coal for powering steamships was scarce on the West Coast during the Gold Rush era and usually had to be imported from the eastern United States or England. By identifying the chemical and physical makeup of the *Winfield Scott's* coal, the Pittsburgh scientists hope to pinpoint its source. From that, historians can begin to piece together information that will help describe where 19th century shippers bought their fuel and what quality fuel they used.

For scientists at the Energy Department's Pittsburgh center, this will not be the first time their expertise has been called upon to help answer historians' questions. The center previously studied coal samples from one of Sir William Corwallis' Revolutionary War vessels which sank off Yorktown, Virginia in 1781. Two years ago, the center was asked to analyze coal from the Civil War ironclad USS *Monitor* which went down off the North Carolina coast in 1862. Coal samples from the wrecks of several Civil War era blockade runners have also been examined by the center's chemists.

The *Winfield Scott* coal will first undergo an analysis to classify its type, which scientists believe is anthracite. The tests will measure precisely the levels of sulfur, ash, moisture and heat value in the coal.

To prevent 130 years of submersion in the Pacific Ocean from distorting the chemical analysis, researchers may have to examine small fragments of the sample under a "petrographic" microscope. This technique can help determine the composition of coal by measuring the degree to which light is reflected from its different mineral and other chemical constituents.

Once the analyses are complete, the data will be compared with the physical and chemical properties of coals found in the eastern United States and England. When the Pittsburgh scientists are certain that the sample matches the characteristics of a known coal type, the source of the *Winfield Scott's* coal will have been identified. **FL**

## Our apologies . . .

Due to a misunderstanding, an article which appeared in the January-March 1983 *Fuel Line* was incorrectly ascribed. "The Computerization of DFSC: Careful Planning Accompanies Bulk Petroleum Management Automation" was written by Rene Weir, a management assistant in the Management Support Office of DFSC's Office of Telecommunications and Information Systems.

**TOP TRAINING — Marjorie R. Armor, a traffic management specialist at Defense Fuel Region-Central, receives from LTC Plocek a Certificate of Achievement for her excellent performance while completing a freight rate training course with industry. The certificate was presented on behalf of the Missouri Pacific Railroad Company.**

## Medicare Money— What Does It Do?

The 1.3 percent deduction from federal employees' salaries which began 1 January will eventually entitle them to Medicare Part A coverage if other requirements are met. Part A coverage insures inpatient care in hospitals, skilled nursing facilities and home health services.

Employees who become entitled to Part A may enroll in Medicare Part B supplementary medical insurance by paying a monthly premium after age 65. Part B insures physicians' services, outpatient hospital and physical therapy as well as other medical supplies and services.

The 1.3 percent Medicare deduction which resulted from a new tax law is made on biweekly gross pay up to a maximum of $35,700 in 1983.

Part of Medicare eligibility is determined by the number of quarters of employment. The employee's newly covered federal employment is combined with quarters of employment under Social Security to help establish eligibility for Medicare.

If an individual was employed by the federal government before 1983 and at any time during January 1983, the employee will receive the judged—or deemed—federal quarters of coverage for service prior to January 1983. Both earned and deemed federal quarters may be combined with Social Security quarters of coverage to establish eligibility for Medicare.

In addition to quarters of coverage, the employee must meet other requirements for Medicare: he must be 65, disabled, or have end-stage renal disease.

Employees already qualified through Social Security-covered employment, or through a family member who is qualified, do not need and will not have federal quarters developed for Medicare purposes. However, these employees will still pay the 1.3 percent tax on the first $35,700 of their earnings.

Federal workers who resigned or retired before 1 January 1983, and who were not federally employed at any time during January 1983, will not receive deemed quarters of coverage for their prior federal service.

It should be noted that Medicare eligibility for federal employees does not make the employee eligible for other Social Security benefits.

Employees may get more information on the Medicare program from their personnel office. **FL**

### Batter Up!

## Help for a Hospital

Once again the Cameron Station women's slow pitch softball league will donate its talents to charity.

The coaches and team members from the league will demonstrate their skills in a game against a local radio or television station on 21 July 1983 beginning at 6:30 p.m. A game between two women's all-star teams will be featured at 5 p.m. Music and dancing will follow the games.

All monies collected from the sale of refreshments and raffles held during the game will be donated to D.C. Children's Hospital.

Watch for further information.

American
Red Cross

Time on your hands?

We could use those hands.

Join us.

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## In Memoriam

Alice Leissler, who was employed by DFSC since September 1973, most recently in the Accounting Branch of the Office of the Comptroller, died after undergoing surgery in April. She will be missed by her co-workers.

## DOD Manpower—How Many Are There?

Servicemembers outnumbered DOD civilians almost two to one, according to figures released by the Pentagon. On 31 October 1982, combined military and civilian manpower totaled 3,175,180 — 2,107,699 military and 1,067,481 civilian.

| | Military | Civilian |
|---|---|---|
| Army | 781,295 | 390,591 |
| Navy | 547,671 | 338,148* |
| Marine Corps | 194,107 | |
| Air Force | 584,626 | 254,535 |
| Other Defense Agencies | | 84,207 |
| TOTALS | 2,107,699 | 1,067,481 |

* Includes Marine Corps civilian personnel

## Military Wives See Need for Improvement

With the growing recognition that family life plays a direct and powerful role on a service member's professional performance, a recently published report from the National Military Wives Association (NMWA) takes on added significance. The report is a result of interviews with more than 3,000 military spouses in Europe and questionnaires returned from 1,340 other wives of servicemen.

While no surprises surfaced from the survey, the report clearly reflects concerns that are being experienced throughout the military community.

For example, the report noted that while "77 percent of the military wives interviewed felt that being a military wife was a rewarding experience . . . they did, however, qualify their answers in many areas and cited numerous problems and issues they face." The report identified what it called a second-class citizens syndrome and said, "The overall issue throughout Europe was the emergence of the feelings of military spouses that They were becoming second-class citizens." They identified a number of examples that supported these feelings. Among them:

A military wife can go through the entire relocation process—packing, moving her family and unpacking—but she is not allowed to sign the moving papers.

A military wife's overseas employment is based solely on her husband's assignment.

Some wives report having difficulty getting medical and dental care and appointments. They perceive that they get better service when accompanied by their spouses.

Some wives reported both obvious and subtle pressures not to seek employment. This was especially true for wives of commanders. They felt "coerced into filling the more traditional volunteer role of military wives."

Morale is weakened due to the pressure placed on military wives "not to speak out."

The NMWA report, titled "Military Spouse and Family Issues," contained 45 recommendations related to the improvement of military family life, and the Office of the Assistant Secretary of Defense for Manpower, Reserve Affairs, and Logistics is acting on many of them.

One of the recommendations regarded the establishment of a family liaison office at the Department of Defense MRA&L level. This issue has been under consideration for some time, and a decision will be made following the findings of an on-going study of family programs, military-wide. The NMWA survey has the backing of Lawrence Korb, Assistant Secretary of Defense for Manpower, who has taken a number of initiatives to strengthen programs that are supportive of service personnel and military families.

A copy of the report may be obtained by writing the National Military Wives Association, 2666 Military Rd., Arlington, Va. 22207. The group's phone number is 703-841-0462. *(Military Family)* **FL**

## Impact Aid Flap

## DOD Offers Aid

"I remain committed to ensuring that no military dependent is denied a free public education," Secretary of Defense Caspar W. Weinberger said in a recent memorandum to the heads of the military departments.

While some school districts may attempt to charge a tuition or exclude military dependents from schools, DOD is ready to take all necessary legal steps to prevent any disruption of military dependent education, he said.

Additionally, the Secretary said DOD will work with the Department of Education and other appropriate agencies in developing impact-aid proposals for fiscal year 1984. The administration feels that military dependents and others residing on federal property should be given the highest priority in any impact-aid proposal.

"Impact-aid payments to school districts will probably continue at fiscal 1982 levels," said Secretary Weinberger, ". . . (which) should alleviate some concerns by school districts nationwide." **FL**

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FLARE

# *Flag Day 1983*

A thoughtful mind, when it sees a nation's flag, sees not the flag only, but the nation itself; and whatever may be its symbols, its insignia, he reads chiefly in the flag the government, the principles, the truths, the history which belongs to the nation that sets it forth.

*The American Flag*
Henry Ward Beecher (1813-1887)

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